

VELOCITY

One of the most fundamental relationships in macroeconomics is that between money and income. Whether expressed as a money demand function, a Federal Reserve reaction function, or a quantity-theory equation of exchange, this relationship has been of paramount interest to academics and policymakers alike. In its simplest form the relationship can be summarized as the ratio of income to money. This ratio, called velocity, was originally used to represent the turnover rate linking money with the total volume of transactions, hence the term transactions velocity. It has since been defined for a number of income measures and for a variety of monetary aggregates. These so-called income velocities have been used to describe how monetary policy relates to income or final demand. The measure used most often is $V1$, the ratio of GNP to $M1$.

During most of the post-World War II period, $V1$ growth remained fairly stable--growing at an average 3 percent annual pace. Another way of stating this is that growth of GNP on average exceeded the growth of money by 3 percent. Unfortunately, starting in late 1981 and continuing through the present period--albeit with a brief hiatus in late 1983 and early 1984-- $V1$ began to diverge significantly, falling sharply below what had come to be its expected growth path. Some economists expected $V1$ growth to increase and $V1$ to return to its trend and cautioned that rapid money growth designed to offset the effects of the velocity decline would ultimately prove inflationary. Others believed that velocity growth had permanently declined and warned that failure to offset the drop would lead to subpar economic growth. Clearly, a proper monetary policy depended upon understanding the deviation in velocity growth.

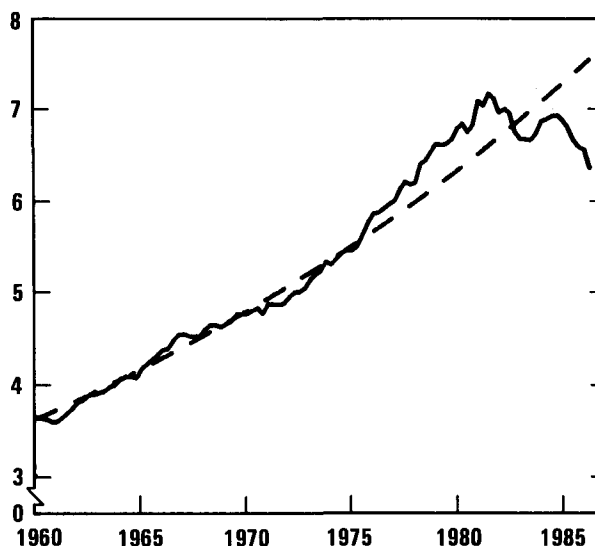
Early studies suggested that the drop in velocity growth in the 1981-1983 period resulted from several factors: an increase in precautionary balances owing to the steepness of two recessions; a sharp drop in inflation and interest rates; and growth in the interest-sensitive component of $M1$ resulting from deposit deregulation. The 1984-1986 declines in velocity growth were attributed to the further drop in interest rates and to an increase in transactions requiring money balances but not contributing to GNP (such as a rise in imports relative to domestic production and an increase in transactions involving existing finan-

yields is usually a result of tightened monetary policy and a precursor of economic downturns, the current flattening has occurred because of falling long-term rates rather than, as usual, rising short-term rates. In this instance, therefore, the flattening yield curve does not seem to be signalling a tighter monetary policy. Moreover, while real short-term interest rates

cial or real assets). Attempts were made to adjust for these changes by redefining both the numerator and the denominator used to calculate velocity. Final demand or income less inventories and net exports was substituted for GNP, and the old definition of M1--currency plus demand deposits--was replaced with one of the newer monetary indexes. Many of these attempts met with limited success, but in the end much of the decline was still unexplained. Of course, this continued uncertainty over the causes and permanence of the velocity shift have made an analysis of current monetary policy highly problematic. It may also have ramifications for fiscal policy. If a less stimulative fiscal policy had the effect of further depressing interest rates and velocity growth, the consequences of large spending cuts might be to weaken economic growth, at least in the near term.

M1 Velocity and Trend

SOURCES: Congressional Budget Office; Federal Reserve Board; Bureau of Economic Analysis, U.S. Department of Commerce.



remain at the very upper edge of their pre-1980 range, they nevertheless have dropped sharply from the high levels of a few years ago.

There is still some risk that velocity growth will rise above its post-war trend rate and recover some of the ground lost since 1981. If that occurred, CBO's forecast of nominal and real GNP could be too low.

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CHAPTER II

THE BUDGET OUTLOOK

The Congressional Budget Office estimates that the federal government deficit (including off-budget items) will reach a record level of \$224 billion in the fiscal year ending September 30, 1986. CBO projects that the fiscal year 1987 deficit would be \$184 billion if current taxing and spending policies were continued without change, and \$161 billion if the policies of the Congressional budget resolution were fully implemented.

Under the somewhat different assumptions of the Balanced Budget Act, CBO's estimate of the 1987 base deficit as of August 15, 1986, is likely to be about \$173 billion. A base deficit of this size would require across-the-board spending reductions of about 8.2 percent for defense programs and 11.5 percent for nondefense programs in order to meet the 1987 deficit target of \$144 billion.

In the longer run, the budget outlook suggests slowly shrinking deficits. In the CBO baseline, which assumes current policies, the deficit would decline to \$127 billion (2.5 percent of gross national product) by 1989 and to \$69 billion (1.2 percent of GNP) by 1991. Implementation of policies of the 1987 Congressional budget resolution would hasten the decline, with the deficit falling to \$84 billion in 1989. Further deficit reduction measures would be required, however, to meet the Balanced Budget Act targets, as shown in Figure II-1.

THE SHORT-RUN BUDGET OUTLOOK

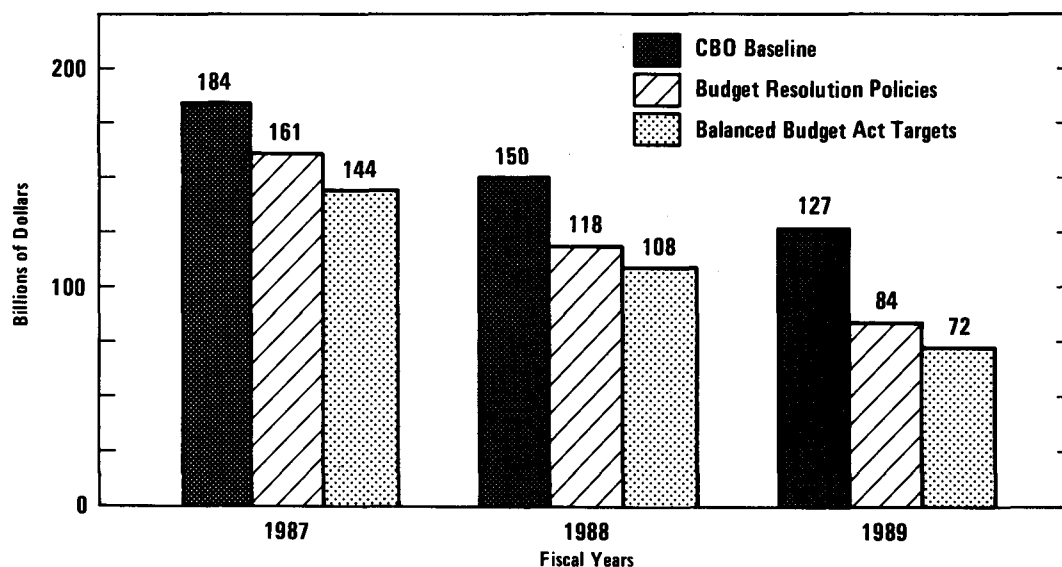
The budget outlook for 1986 and 1987 has worsened since CBO's annual report last February. Legislative action--notably the Consolidated Omnibus Budget Reconciliation Act of 1985 (Public Law 99-272), nicknamed COBRA--has reduced spending and increased taxes. But these Congressional efforts have been more than offset by several unfavorable developments. A shortfall in economic growth has held down revenues, while projected spending for national defense, farm price supports, deposit insurance, and other programs exceeds earlier estimates.

1986 Budget Estimates

The CBO estimates that federal government spending will reach \$991 billion in 1986--an increase of \$5 billion over CBO's February figure (see Table II-1). Estimated revenues for the current fiscal year are \$767 billion--a drop of \$11 billion since February. As a result, the projected deficit has risen by \$16 billion over the past six months. This increase comprises additions of \$14 billion from technical estimating changes and \$7 billion stemming from revised economic assumptions, minus \$5 billion from changes in tax and spending laws.

Economic developments have cut estimated revenues substantially but have had little effect on total 1986 outlays. A sluggish economy and reduced inflation have lowered corporate profits, and the drop in oil prices has cut windfall profit tax receipts, so that estimated 1986 revenues are down by \$6 billion. On the outlay side, lower interest rates have held down debt service costs, but lower energy prices have cut offsetting receipts from both

Figure II-1.
Deficit Projections and Targets^a



SOURCE: Congressional Budget Office.

^a Includes Social Security, which is off-budget.

onshore and offshore oil and gas production by a slightly larger amount, increasing outlays by a net of \$1 billion.

For technical reasons, total spending for a number of programs exceeds the February estimates by \$8 billion. The major increases are \$5 billion for the Department of Defense and \$3 billion for the Federal Deposit Insurance and Federal Savings and Loan Insurance Corporations. Technical revisions have lowered revenues by \$6 billion.

The Budget Outlook for 1987

The Balanced Budget Act of 1985 established a target deficit of \$144 billion for fiscal year 1987. Because action on the 1987 budget is not yet complete,

TABLE II-1. THE OUTLOOK FOR FISCAL YEARS 1986 AND 1987
(In billions of dollars)

	1986 Estimate	1987		
		CBO Baseline Projection	Base for Balanced Budget Act	Budget Resolution Policies
Total, Including Social Security				
Outlays	991	1,012	1,001	995
Revenues	767	828	828	834
Deficit	224	184	173	161
On-Budget, Excluding Social Security				
Outlays	807	819	n.a.	801
Revenues	567	614	n.a.	620
Deficit	240	205	n.a.	181

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

it is too early to measure precisely the extent to which the projected 1987 deficit might differ from the target. The target can, however, be compared with three different projections:

- o The CBO baseline assumes a continuation of budgetary policies now in place. The baseline deficit for 1987 is projected to be \$184 billion--\$40 billion over the target.
- o The Balanced Budget Act defines a slightly different base, which is to be used if 1987 appropriations are not completed. If no appropriations actions are taken, the projected base deficit for sequestration is \$173 billion.
- o The policies assumed by the Congressional budget resolution imply a deficit of \$161 billion.

The conceptual differences between these projections are described below, and their quantitative importance is detailed in Table II-2. Unless otherwise noted, all projections cited here use CBO's economic and technical estimating assumptions.

CBO Baseline. The CBO baseline projection shows where the budget is headed if current taxing and spending policies are continued without change. It is not a prediction of future budgets, which will doubtless include numerous policy changes. Rather it provides a benchmark against which proposed policies can be measured.

Federal spending can be divided into two categories. The first category--mandated by existing law--includes spending for Social Security benefits and other entitlement programs, for permanent appropriations such as interest on the public debt, and for most trust funds and other special funds. For these programs and for revenues, the baseline generally assumes continuation of current law and termination of expiring provisions. Highway and airport and airway taxes, however, are extended beyond their current expiration dates. Federal spending not mandated by existing law is controlled through the appropriation process. The 1987 baseline projection assumes that the 1986 appropriations, including supplemental appropriations, are adjusted to keep pace with inflation.

Base for Balanced Budget Act. Different budgetary assumptions are specified in the Balanced Budget Act for determining whether the law's deficit reduction provisions are triggered. Under the fallback provisions of the act, the Congress will consider across-the-board spending cuts under

TABLE II-2. DIFFERENCES AMONG CBO BASELINE, BASE FOR SEQUESTRATION, AND BUDGET RESOLUTION FOR FISCAL YEAR 1987 (In billions of dollars)

	Revenues	Outlays	Deficit
CBO Baseline Projection	828	1,012	184
Differences			
Exclusion of discretionary inflation and other adjustments to 1986 appropriation levels			
Defense programs	--	-7	-7
Nondefense programs	--	-4	-4
Adjustment in net interest costs	--	<u>a/</u>	<u>a/</u>
Total differences	--	-11	-11
Base for Balanced Budget Act	828	1,001	173
Differences			
Assumed spending changes			
Defense programs	--	2	2
Nondefense programs	--	-7	-7
Assumed revenue increases	6	--	-6
Adjustment in net interest costs	--	<u>-1</u>	<u>-1</u>
Total differences	6	-6	-12
Budget Resolution Policies	834	995	161

SOURCE: Congressional Budget Office.

NOTE: Includes Social Security revenues and outlays, which are off-budget.

a. Less than \$500 million.

highly expedited procedures if CBO and the Office of Management and Budget (OMB) estimate a 1987 base deficit averaging over \$154 billion. Because appropriations for the coming fiscal year have not yet been enacted, the Balanced Budget Act provides that the outlay base assume appropriations at the 1986 dollar level, without adjustment for inflation. The outlay base estimates also include the pay increase allowances for military and federal civilian employees proposed in the Administration's mid-session review of the 1987 budget, which are lower than those in the CBO baseline assumptions. Differences in assumed appropriations cause the outlay base for the Balanced Budget Act to be lower than the baseline by \$7 billion for defense programs and \$4 billion for nondefense programs. These differences in turn cause the budget base for the Balanced Budget Act to have slightly lower net interest outlays than those in the CBO baseline.

Budget Resolution. On June 26, 1986, the Congress adopted the Concurrent Resolution on the Budget for Fiscal Year 1987 (S. Con. Res. 120). While the precise policy assumptions of the budget resolution are not binding, the budget resolution establishes a plan to guide subsequent Congressional action on revenue and spending legislation. This year's budget resolution assumes revenue increases of \$6 billion and spending reductions of \$17 billion compared with the updated CBO baseline. Compared with the base for the Balanced Budget Act, the spending reductions in the budget resolution total \$6 billion.

Spending Reductions Under the Balanced Budget Act

The Balanced Budget Act establishes a series of declining deficit targets, culminating in a balanced budget in fiscal year 1991. Both the President's budget submissions and the Congressional budget resolution are required to meet these targets. The deficit target for 1987 is \$144 billion. Unless action is actually taken to reduce the deficit to within \$10 billion of this target level before the beginning of the fiscal year, the act provides special procedures to achieve the target. Although the Supreme Court has determined that the act's provisions for automatic spending reductions are unconstitutional, the across-the-board reduction of budgetary resources (termed sequestration) remains an option to be used by the Congress under the fallback procedures provided in the law. Alternatively, the Congress may reach the target through another package of deficit reduction measures. Legislation is also pending in the Congress to restore some form of automatic deficit reduction procedures.

The process for fiscal year 1987 begins later this month. On August 20, the Directors of the Congressional Budget Office and the Office

of Management and Budget will send the Congress a joint report. The law requires that the report include:

- o Estimated budget base levels as of August 15 and the amount by which the projected 1987 deficit exceeds \$144 billion;
- o CBO and OMB economic assumptions, including their estimates of the rate of real economic growth; and
- o The amounts and percentages by which various budgetary resources must be reduced in order to eliminate any deficit excess.

Unless the Balanced Budget Act is amended before August 20, this report will be referred to the Temporary Joint Committee on Deficit Reduction, which is composed of the entire membership of the House and Senate Committees on the Budget. Within five days of the end of the Congressional recess on September 8, the Joint Committee shall report a joint resolution providing for the sequestration of budgetary resources exactly as specified in the CBO/OMB report. A vote on final passage of the joint resolution shall be taken within five days after it is reported. No amendment to the resolution may be considered, and debate is limited to two hours. If enacted, the joint resolution would constitute an initial sequestration order, which would withhold budgetary resources at the start of the fiscal year on October 1.

On October 6, OMB and CBO will issue a revised report on the estimated deficit for fiscal year 1987 and any spending reductions required to eliminate the deficit excess as then calculated. This revised report will reflect any changes in laws or regulations made since August 15. Without a change in the Balanced Budget Act procedures, the Congress will consider the revised report under the same procedures outlined above. If adopted as a joint resolution and approved by the President, the revised report would constitute a final sequestration order, which would permanently cancel budgetary resources.

The CBO currently estimates that the base deficit for 1987 is \$173 billion and that the excess deficit is \$29 billion. The August 20 estimate will differ from this amount if new budgetary legislation is enacted (for example, the pending reconciliation bill) or if the Administration promulgates final regulations changing spending policies (for example, the elimination of periodic interim payments under Medicare, recently issued as a Notice of Proposed Rulemaking). Even without any policy changes, the defi-

cit estimate could change, based on new information about economic or budgetary developments. Finally, the deficit amount in the report to the Congress will be an average of CBO and OMB estimates, not the CBO estimate alone.

THE BUDGET OUTLOOK THROUGH 1991

The CBO has updated its baseline budget projections for fiscal years 1987 through 1991 to reflect legislation enacted since February as well as CBO's new economic and technical estimating assumptions. It has also reestimated the Congressional budget resolution for fiscal years 1987 through 1989 to put it on a consistent basis with the updated baseline. The following sections describe first the updated CBO baseline and then CBO's projections of the deficit under the policies of the budget resolution.

CBO Baseline

Table II-3 details CBO's updated baseline projections. Under current budgetary policies, the federal government deficit would decline from \$224 billion (5.4 percent of GNP) in 1986 to \$184 billion (4.2 percent of GNP) in 1987 and \$69 billion (1.2 percent of GNP) by 1991. Outlays would decline relative to GNP because the baseline generally assumes no real growth in spending, while the economy is assumed to grow about 3 percent per year in real terms. Revenues would grow faster than the economy because of scheduled increases in social insurance contributions, and because economic growth pushes individual income taxpayers into higher tax brackets. (The tax rate structure is indexed for inflation but not for real growth.) It is also assumed that the share of corporate profits subject to tax will increase.

The on-budget and off-budget components of federal spending and revenues are shown separately in Table II-4. The Balanced Budget Act of 1985 removed from the budget totals the two Social Security trust funds--Old-Age, Survivors, and Disability Insurance (OASDI). The table shows that Social Security is projected to run surpluses each year, and that the surplus will grow by \$64 billion between 1986 and 1991. The projected decline in the on-budget deficit is, therefore, much less than the drop in the total deficit. Nevertheless, the total deficit is used in calculating the excess deficit amount under the Balanced Budget Act. The total deficit also provides a better measure of the federal government's effect on the economy and on credit markets.

TABLE II-3. UPDATED CBO BASELINE PROJECTIONS
FOR FISCAL YEARS 1986-1991

	1986	1987	1988	1989	1990	1991
In Billions of Dollars						
Revenues						
Individual income	349	381	421	458	496	535
Corporate income	62	76	92	103	112	123
Social insurance	284	301	332	356	387	417
Other	72	71	71	70	72	74
Total	767	828	915	987	1,067	1,148
Outlays						
Defense	273	284	295	310	325	341
Entitlements	457	467	499	527	558	593
Nondefense discretionary	172	173	183	190	197	206
Net interest	137	139	147	151	150	149
Offsetting receipts	-48	-51	-59	-64	-67	-72
Total	991	1,012	1,065	1,113	1,162	1,217
Deficit	224	184	150	127	96	69
Debt Held by the Public	1,739	1,924	2,071	2,195	2,290	2,358
As a Percent of GNP						
Revenues						
Individual income	8.4	8.6	8.9	9.0	9.1	9.1
Corporate income	1.5	1.7	1.9	2.0	2.1	2.1
Social insurance	6.8	6.8	7.0	7.0	7.1	7.1
Other	1.7	1.6	1.5	1.4	1.3	1.3
Total	18.4	18.7	19.2	19.3	19.5	19.5
Outlays						
Defense	6.6	6.4	6.2	6.1	5.9	5.8
Entitlements	11.0	10.6	10.5	10.3	10.2	10.1
Nondefense discretionary	4.1	3.9	3.9	3.7	3.6	3.5
Net interest	3.3	3.1	3.1	3.0	2.7	2.5
Offsetting receipts	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
Total	23.8	22.9	22.4	21.8	21.2	20.7
Deficit	5.4	4.2	3.2	2.5	1.7	1.2
Debt Held by the Public	41.8	43.5	43.6	43.0	41.8	40.1
Memorandum: GNP (In billions of dollars)	4,164	4,423	4,753	5,102	5,477	5,876

SOURCE: Congressional Budget Office.

NOTE: Includes Social Security revenues and outlays, which are off-budget.

The baseline budget deficit for 1987 has increased slightly since CBO's February assessment, but the outlook for subsequent years has improved. This pattern of changes results primarily from revisions to the economic assumptions. Economic reestimates add \$3 billion to the 1987 deficit, as lower interest rates and cost-of-living adjustments fail to offset completely the effect of lower revenues. Lower interest rates and higher ratios of taxable incomes to GNP, however, combine to reduce the deficit by amounts growing from \$12 billion in 1988 to \$35 billion by 1991. Recently enacted legislation, primarily COBRA, has reduced the baseline deficit by an average of \$13 billion per year in the 1987-1991 period, but technical estimating changes have added back almost as much. Table II-5 apporitions the changes in CBO's baseline projections since February among the three major sources of difference--enacted legislation, revised economic assumptions, and technical reestimates.

TABLE II-4. CBO BASELINE PROJECTIONS FOR ON-BUDGET AND OFF-BUDGET SPENDING AND REVENUES
(By fiscal year, in billions of dollars)

	1986	1987	1988	1989	1990	1991
Baseline Revenues						
On-budget	567	614	673	722	776	833
Off-budget (OASDI) <u>a/</u>	<u>200</u>	<u>213</u>	<u>242</u>	<u>264</u>	<u>290</u>	<u>316</u>
Total	<u>767</u>	<u>828</u>	<u>915</u>	<u>987</u>	<u>1,067</u>	<u>1,148</u>
Baseline Outlays						
On-budget	807	819	864	901	939	981
Off-budget (OASDI) <u>a/</u>	<u>184</u>	<u>193</u>	<u>202</u>	<u>212</u>	<u>223</u>	<u>236</u>
Total	<u>991</u>	<u>1,012</u>	<u>1,065</u>	<u>1,113</u>	<u>1,162</u>	<u>1,217</u>
Baseline Deficit (-) or Surplus						
On-budget	-240	-205	-191	-179	-163	-148
Off-budget (OASDI) <u>a/</u>	<u>16</u>	<u>21</u>	<u>41</u>	<u>53</u>	<u>67</u>	<u>80</u>
Total	<u>-224</u>	<u>-184</u>	<u>-150</u>	<u>-127</u>	<u>-96</u>	<u>-69</u>

SOURCE: Congressional Budget Office.

a. OASDI = Old-Age, Survivors, and Disability Insurance.

Revenues. Projected revenues for 1987 have been lowered by \$16 billion, principally as a result of downward revisions in incomes, especially corporate profits. Projected revenues for 1988 through 1990 are also lower

TABLE II-5. CHANGES FROM CBO FEBRUARY BASELINE
PROJECTIONS (By fiscal year, in billions of dollars)

	1986	1987	1988	1989	1990	1991
Revenues						
CBO February Baseline	778	844	921	991	1,068	1,144
Enacted legislation	1	3	3	3	3	3
Revised economic assumptions	-6	-16	-8	-4	a/	6
Technical reestimates	-6	-3	-1	-4	-4	-4
Updated Baseline	767	828	915	987	1,067	1,148
Outlays						
CBO February Baseline	986	1,025	1,086	1,135	1,188	1,248
Enacted legislation	-4	-10	-8	-10	-13	-14
Revised economic assumptions	1	-12	-19	-20	-24	-29
Technical reestimates	8	9	6	9	12	12
Updated Baseline	991	1,012	1,065	1,113	1,162	1,217
Deficit						
CBO February Baseline	208	181	165	144	120	104
Enacted legislation	-5	-12	-10	-13	-15	-16
Revised economic assumptions	7	3	-12	-17	-25	-35
Technical reestimates	14	12	7	12	15	16
Updated Baseline	224	184	150	127	96	69

SOURCE: Congressional Budget Office.

NOTE: Includes Social Security revenues and outlays, which are off-budget.

a. Less than \$500 million.

than in February--by \$6 billion in 1988, \$5 billion in 1989, and \$1 billion in 1990. By 1991, taxable personal and corporate incomes are estimated to claim higher shares of GNP than projected in February, raising revenues above CBO's February estimate. Including the effects of new legislation and technical reestimates, 1991 revenues rise by \$5 billion despite the overall downward revision in GNP.

Two laws that have been enacted since February have an important effect on revenues. The Consolidated Omnibus Budget Reconciliation Act of 1985 will increase revenues by about \$3 billion per year, mostly through an increase in cigarette taxes, extension of Medicare coverage to newly hired state and local employees, and the disallowance of income averaging to taxpayers who have recently been students. The Federal Employees' Retirement System Act of 1986 (Public Law 99-335) will reduce baseline revenues each year, by amounts ranging up to \$600 million in 1991.

Technical reestimates lower revenues by \$1 billion to \$4 billion per year. The largest technical reestimate occurs in individual income taxes--the major tax source, which provides 46 percent of revenues. A significant component of this reestimate results from a reduction in expected revenues from taxing Social Security benefits.

When economic, legislative, and technical revisions are considered together, the economic revisions predominate and determine the character of the overall revisions. The largest economic revisions occurred in corporate income taxes, which are lower by \$12 billion in 1987 and by diminishing amounts in 1988 and 1989. By 1991, however, higher projected taxable income raises corporate taxes by \$9 billion relative to February, despite the lower GNP. The taxable share of corporate profits is projected to grow over time, mostly because a larger share of corporate income is earned domestically, not abroad. In addition, depreciation deductions are assumed to remain flat rather than rise. Individual income tax revisions are relatively small because higher taxable income shares more than offset the lower GNP until 1990 when taxable personal income first falls below February's estimate. Finally, no new windfall profit tax liability is projected for 1987 through 1991 because of lower projected oil prices. This change reduces net revenues by about \$1 billion each year.

Outlays. Projected outlays have declined since February by amounts growing from \$13 billion in 1987 to \$31 billion by 1991 resulting, largely from changes in economic assumptions. Enacted legislation has cut spending by about \$11 billion annually. Almost all of this decrease is a result of COBRA, which terminated General Revenue Sharing, provided for the re-

lease from escrow of disputed Outer Continental Shelf (OCS) receipts, and reduced Medicare payments. Other recent legislation, including supplemental appropriations and civilian and military retirement reform, have had little aggregate effect.

The revisions to the economic assumptions have reduced spending by \$12 billion in 1987, with reductions growing to \$29 billion by 1991. The major reductions are in net interest and other interest-sensitive programs (\$8 billion in 1987 and \$15 billion in 1991), cost-of-living adjustments for indexed benefit programs (\$6½ billion in 1987 and \$12 billion in 1991), and federal civilian and military pay raise allowances (\$½ billion in 1987 and \$3 billion in 1991). These reductions are offset slightly by lower receipts from both onshore and offshore oil and gas production.

Technical reestimates raise outlays in all years. New information from the Federal Deposit Insurance Corporation (FDIC) indicates that the rescue of insolvent financial institutions will cost \$4 billion per year more than previously estimated. Projected outlays for farm price supports have been increased by between \$1 billion to \$3 billion per year--an increase caused largely by a delay in the anticipated improvement in export markets and the resulting reductions in planned inventories. The technical reestimates to outlays and revenues also cause an increase in debt service costs amounting to \$1 billion in 1987, \$2 billion in 1988, and \$4 billion by 1991.

Congressional Budget Resolution

Implementing the policies of the Congressional budget resolution would reduce the federal deficit by \$23 billion in 1987, \$32 billion in 1988, and \$43 billion in 1989 compared with the CBO baseline. Reconciliation instructions require particular House and Senate committees to achieve \$9 billion of these savings in 1987, \$7 billion in 1988, and \$10 billion in 1989. The remainder of the savings is to be achieved through the appropriation process and other legislation.

The policy changes in the budget resolution are summarized in Table II-6. The table assumes that no use is made of the resolution's contingency fund for deficit reduction and unmet critical needs. Unspecified revenue increases would reduce the deficit by \$6 billion to \$7 billion per year. Defense outlays would be reduced by \$5 billion in 1987, \$10 billion in 1988, and \$12 billion in 1989.

Outlays for entitlement programs would differ very little from the baseline. Under current law, beneficiaries of Social Security and related

programs will not receive a cost-of-living adjustment next January, because inflation since the last adjustment will not exceed 3 percent. The budget resolution proposes to eliminate the 3 percent trigger, thereby increasing entitlement spending by \$2 billion in 1987 and \$1 billion in 1988. Reductions in Medicare would save \$1 billion in 1988 and \$2 billion in 1989. Other assumed changes in entitlements total less than \$1 billion per year.

The budget resolution reduces nondefense discretionary spending by \$7 billion in 1987, \$10 billion in 1988, and \$17 billion in 1989. Budget functions facing particularly large cuts include international affairs, science and space, and transportation.

The budget resolution assumes increases in offsetting receipts totaling \$5 billion in 1987 and \$3 billion in 1988. The 1987 increase includes \$1.9 billion for the sale of Conrail, \$1.2 billion for the recoupment of oil

TABLE II-6. POLICY CHANGES IN THE 1987 BUDGET RESOLUTION
AS ESTIMATED BY CBO (By fiscal year,
in billions of dollars)

	1987	1988	1989
CBO Baseline Deficit	184	150	127
Deficit Reductions as Estimated by CBO			
Revenue increases <u>a/</u>	-6	-6	-7
National defense	-5	-10	-12
Entitlements	1	<u>b/</u>	-2
Nondefense discretionary	-7	-10	-17
Offsetting receipts	-5	-3	<u>b/</u>
Net interest	<u>-1</u>	<u>-3</u>	<u>-5</u>
Total reductions	-23	-32	-43
Deficit in Budget Resolution as Estimated by CBO	161	118	84

SOURCE: Congressional Budget Office.

NOTE: Includes Social Security revenues and outlays, which are off-budget.

a. Revenue increases appear as negative numbers because they reduce the deficit.

b. Less than \$500 million.

overcharge funds, and \$1 billion from sale of unspecified loan assets. The 1988 target includes \$1.5 billion from sale of the Naval Petroleum Reserves and another \$1 billion from unspecified loan asset sales. There are no offsetting receipt savings in 1989 because the assumed sales of Conrail and the Naval Petroleum Reserves and the assumed reductions in federal agency contributions for employee retirement reduce receipts by more than the small increases from additional loan asset sales and user fees.

The CBO estimates that deficits under the policies of the Congressional budget resolution will be higher than those specified in the resolution itself, especially in 1987. As shown in Table II-7, CBO reestimates add \$18 billion to the budget resolution deficit in 1987. Economic factors add \$9 billion to the budget resolution deficit in 1987, but reduce the deficits by \$3 billion and \$8 billion in 1988 and 1989, respectively. Technical reestimates add to the deficits in all years.

TABLE II-7. CBO REESTIMATES OF THE BUDGET RESOLUTION
(By fiscal year, in billions of dollars)

	1987	1988	1989
Deficit in Budget Resolution	143	116	78
CBO Economic Reestimates			
Revenues	16	8	4
Net interest	-7	-9	-8
Other	<u>a/</u>	<u>-2</u>	<u>-3</u>
Subtotal	<u>9</u>	<u>-3</u>	<u>-8</u>
CBO Technical Reestimates	<u>10</u>	<u>6</u>	<u>13</u>
Total reestimates	<u>18</u>	<u>2</u>	<u>6</u>
Deficit in Budget Resolution as Estimated by CBO	161	118	84

SOURCE: Congressional Budget Office.

NOTE: Includes Social Security revenues and outlays, which are off-budget.

a. Less than \$500 million.

With a few exceptions, the economic and technical reestimates to the budget resolution are the same as the reestimates to the CBO baseline, discussed in detail earlier. The economic reestimates differ from those in the resolution largely because of different assumptions about cost-of-living adjustments and about federal employee pay raises. During its work on the budget resolution, the Congress assumed--based on economic developments since February--that the January 1987 cost-of-living adjustment (COLA) for Social Security and related programs would be 2.0 percent, instead of the 3.4 percent assumed in CBO's February baseline. CBO now estimates that the January 1987 COLA under the policies of the budget resolution will be 1.3 percent. Reestimates to the budget resolution, therefore, reflect a reduction in the 1987 Social Security COLA from 2.0 percent to 1.3 percent. Because under current law no COLA is paid when inflation is less than 3 percent, the reestimates to the baseline reflect a reduction from 3.4 percent to zero. This difference in COLA assumptions adds \$5 billion to the economic reestimates in 1987 and 1988 and \$4 billion in 1989.

The other major difference in the economic reestimates concerns assumptions about pay raises for federal employees. In the baseline, federal pay is assumed to keep pace with private wage rates. Because private-sector earnings are now projected to be growing less rapidly than they were in February, the baseline has been reduced accordingly. But no adjustments to pay raises have been made for the budget resolution, which assumes pay raise allowances that are fixed in dollar terms. This second difference causes the reestimates to the budget resolution to exceed the baseline reestimates by \$1 billion in 1987, \$3 billion in 1988, and \$4 billion in 1989.

Technical reestimates of the budget resolution for both revenues and outlays are generally identical to CBO's technical adjustments to the baseline. The major exception is for defense spending, for which the budget resolution outlays are a target to be achieved through appropriation action and, therefore, have not been reestimated.

Federal Sector of the National Income and Product Accounts

Both the budget and the federal sector of the national income and product accounts (NIPA) measure the receipts and expenditures of the federal government. The NIPA federal sector, however, is designed to be more useful than the budget for analyzing the economic impact of federal government activity. The NIPA estimates of federal government activity differ from those of the budget in timing, treatment of receipts and financial activities, and coverage. Table II-8 shows estimates of federal-sector receipts on a NIPA basis, consistent with the CBO baseline budget projections.

TABLE II-8. PROJECTIONS OF CBO BASELINE RECEIPTS AND EXPENDITURES ON A NATIONAL INCOME AND PRODUCT ACCOUNTS BASIS (By fiscal year, in billions of dollars)

	1986 Estimate	Baseline Projection				
		1987	1988	1989	1990	1991
<hr/>						
Receipts						
Personal tax and nontax receipts	354	382	423	458	497	536
Corporate profits tax accruals	75	94	111	121	132	141
Indirect business tax and nontax accruals	53	52	52	53	54	56
Contributions for social insurance	<u>326</u>	<u>347</u>	<u>385</u>	<u>419</u>	<u>452</u>	<u>486</u>
Total	808	875	972	1,051	1,135	1,219
Expenditures						
Purchases of goods and services	369	376	393	413	432	452
Defense	276	289	301	316	332	349
Nondefense	93	87	92	97	100	103
Transfer payments	390	403	431	460	492	528
Grants-in-aid to state and local governments	103	102	105	109	114	119
Net interest paid	138	141	149	152	151	149
Subsidies less current surplus of government enterprises	<u>24</u>	<u>25</u>	<u>31</u>	<u>28</u>	<u>29</u>	<u>29</u>
Total	1,024	1,045	1,108	1,163	1,217	1,277
Deficit	216	170	136	112	82	58

SOURCE: Congressional Budget Office.

TABLE II-9. RELATIONSHIP OF THE BUDGET TO THE FEDERAL
SECTOR OF THE NATIONAL INCOME AND PRODUCT
ACCOUNTS (By fiscal year, in billions of dollars)

	1986 Estimate	Baseline Projection				
		1987	1988	1989	1990	1991
Receipts						
Total Revenues <u>a/</u>	767	828	915	987	1,067	1,148
Contributions for						
Employee Retirement	34	37	44	48	52	56
Medicare Premiums	6	6	7	8	9	9
Other Netting and						
Grossing	8	8	8	8	8	9
Geographic Exclusions	-2	-2	-2	-2	-2	-2
Other	-5	-1	-1	1	1	-1
Federal Sector						
NIPA Receipts	808	875	972	1,051	1,135	1,219
Expenditures						
Total Outlays <u>a/</u>	991	1,012	1,065	1,113	1,162	1,217
Lending and Financial						
Transactions	-12	-14	-14	-11	-10	-9
Contributions for						
Employee Retirement	34	37	44	48	52	56
Medicare Premiums	6	6	7	8	9	9
Other Netting and						
Grossing	8	8	8	8	8	9
Defense Timing Adjust-						
ment	3	3	3	3	3	3
Bonuses on Outer						
Continental Shelf						
Land Leases	2	2	b/	b/	b/	b/
Geographic Exclusions	-6	-6	-6	-6	-7	-7
Other	-2	-2	-1	-1	-1	-2
Federal Sector						
NIPA Expenditures	1,024	1,045	1,108	1,163	1,217	1,277

SOURCE: Congressional Budget Office.

a. Includes on-budget and off-budget activities.

b. Less than \$500 million.

Certain payments that appear as offsets to outlays in the budget are treated as receipts in the federal sector of the NIPA. Of these payments, by far the largest is contributions to employee retirement. Financial transactions, such as bonuses on OCS land leases and loan asset sales, are excluded from the NIPA federal sector, as are transactions involving Puerto Rico and other territories. One timing difference involves corporate profits. The unified budget records corporate profit taxes at the time payments are made, while the NIPA records them when they accrue. Also, NIPA defense purchases reflect the delivery of completed products, while the budget shows payments to contractors, including payments for work-in-progress.

The differences between the budget and the federal sector of the NIPA are detailed in Table II-9. Since CBO's February baseline projections, estimates of contributions for employee retirement have increased substantially, reflecting the adoption of retirement reform legislation. Employee contributions to the new thrift plan combine with increases in agency contributions to the adjustment relative to its February level. Higher lending exclusions mainly reflect increases in FDIC spending, while lower oil price assumptions reduce bonuses on OCS leases, as discussed above.

